Limb extensions were positioned to bilateral external iliac arteries (EIAs). After the Viabahn deployment, a self-expandable nitinol stent was deployed overlapping inside the Viabahn, landing in the right EIA and 2 mm distal to the right limb extension. Complete angiography showed there was no endoleak from the IIA or the chimney graft gutter, the false lumen was totally excluded, and the chimney graft to the left IIA was patent. The CSF drainage was removed 48 hours after the procedure and the patient recovered uneventfully. He was discharged with aspirin antiplatelet.
Results: The computed tomographic angiography 6 months after the procedure demonstrated a total thrombosis of the false lumen, the patency of all grafts and a good accommodation of the crossover chimney graft with the right iliac limb extension.
Conclusions: Our experience showed that type B dissection may develop ruptured aortic dissection aneurysm long time after TEVAR. The multiple entry tears may be troublesome during the reintervention, however the crossover chimney technique may help preserve the IIA flow in case with bilateral iliac entry tears.

GW25-e5284

Periodontal Pathogen exacerbate the development of experimental Abdominal Aortic Aneurysms and stimulate IL-6 and MMP-9 expression

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Objectives: Abdominal aortic aneurysm (AAA) represents a common degenerative vascular condition with life-threatening risks. Periodontal pathogens are detected at a high rate in specimens obtained from the aortic walls of patients with AAA. However, the role of the periodontal infection remains unclear. The purpose of this study was to analyze the influence of periodontal pathogen on AAA dilatation and plausible mechanism.
Methods: AAA was produced by peri-aortic application of 0.25 mol/L CaCl2, with NaCl used as a control. The mice were inoculated with live *Porphyromonas gingivalis* or vehicle once weekly.
Results: Eight weeks later after the periaortic application of $CaCl_2$, the dilation rates of the the aortic diameter is significantly higher in *P. gingivalis* infection mice than those without *P. gingivalis* infection. Immunohistochemical analysis found significantly higher levels of MMP-9 in the aneurysmal samples of *P. gingivalis*-challenged mice compared with control mice. Serum IL-6 and MMP-9 levels also significantly elevated in the $CaCl_2$ treated mice with *P. gingivalis* infection than those without *P. gingivalis* infection.
Conclusions: Chronic P. gingivalis infection stimulates IL-6 secretion favoring MMP-9 expression and ultimately accelerating AAA development. These findings suggest that periodontal pathogen may influence AAA development via MMP-9 induction.

GW25-e1664

Using ultrasound Doppler to optimization of the table speed of lower extremity CT angiography protocols

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Objectives: Scanning with 64-slice multidetectorrow CT (MDCT) is usually faster than blood flow in peripheral arteries of the lower extremities, and the distal arteries of lower extremities are difficult to visualize, particularly in the case of patients with diffuse atherosclerosis and asymmetric arterial disease. Thus, predetermination of the flow velocity in the arterial circulation and aligning the flow velocity and table speed to achieve optimal synchronization of the acquisition with the propagation of the contrast bolus is important. We evaluated the relative efficacy of different table speeds predetermined by using the flow velocity measured by ulsound Doppler in patients with patients with suspected peripheral arterial occlusive disease (PAOD) undergoing CTA of lower extremity arteries.
Methods: This prospectively study enrolled 40 patients with suspected PAOD. The average aorta-popliteal artery flow velocity (VAO-POP) was measured by ultrasound of average flow velocity of the suprarenal aorta, aortic bifurcation, common and iliac arteries, Common and superficial (proximally/middle/distally) femoral arteries, popliteal artery (Vaorta+ Vaorta2+ VCCA+ VSFA1+ VSFA2+ VSFA3+ VPOPA/ 7). The table speed is adjusted to be equivalent to the measured arterial flow velocity between the supraceliac aorta and popliteal artery. Adequate vascular opacification was measured for attenuation in the suprarenal and infrarenal abdominal aorta and in the arteries of the lower extremity. Venous contamination was also measured. 20 patients also underwent using 2 monitoring scans at the level of the suprarenal aorta and popliteal artery, measure of aortopopliteal bolus transit times and speeds.
Results: The flow velocity from US Doppler and 2 monitoring scans technique was very similar. CT angiographic images were of good quality in 39 cases, whereas prominent enhancement of abdominal veins was observed in 1 cases.
Conclusions: Aligning the flow velocity measured by US Doppler and table speed can allow adequate arterial opacification and minimal venous contamination.

GW25-e2255

Effect and mechanism of bradykinin on tissue factor expression and thrombosis

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Objectives: To investigate the effect and mechanism of bradykinin on tissue factor expression and thrombosis.
Methods: The experimental animals were randomly divided into three groups (sham, mode, bradykinin), with 8 mice in each group. Having received corresponding treatment, the mice were inferior Vena Cava ligated. Two days later, the mice were sacrificed and the tissues were harvested for relative tests. At the same time, in the in vitro study, endothelial cells and monocytes were incubated. We treated the cells with different concentrations of bradykinin, followed by lipopolysaccharide induction for 4 hours, and then the protein was extracted and TF expression was measured, after which we searched for the underlying mechanisms.
Results: Ligation of inferior Vena Cava induced thrombosis, and this trend was largely attenuated by the intraperitoneal injection of bradykinin, both in thrombus size and generation rate. Expression of tissue factor in thrombus and the fibrin in the liver of the bradykinin team were also greatly reduced, with inflammation cytokines simultaneously decreased. Correspondently, by up-regulating PI3K/AKT and down-regulating MAPK signaling pathways, bradykinin dose dependently inhibited the expression of tissue factor in the endothelial cells and monocytes.
Conclusions: By regulating PI3K/AKT and MAPK signaling pathways bradykinin can reduce the expression of tissue factor and suppress the stasis induced thrombus in intact vessels.

GW25-e3539

Association of dyslipoproteinemia with the disease activity of Takayasu arteritis

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Objectives: Our study aimed to determine whether proatherogenic lipid profiles exist in patients with active TA and to assess the relationship between different lipid profiles and disease activity in TA.
Methods: A total of 120 premenopausal female patients with TA and 100 sex-, age-, and body mass index-matched healthy controls were included in our study. The clinical data were collected in detail from all participants.
Results: Patients with active TA significantly have higher ratios of apolipoproteinB/apolipoproteinA1 (apoB/apoA1) (0.70±0.27 vs. 0.48±0.14, $P<0.001$), and lower levels of apolipoproteinA1 (apoA1) (1.48±0.30 vs. 1.99±0.33mmol/L, $P<0.001$) and high density lipoprotein cholesterol (HDL-C) (1.22±0.33 vs. 1.68±0.38 mmol/L, $P<0.001$) compared with patients with inactive TA. Multiple linear regression analysis found that the apoB/apoA1 ratio was independently associated with TA activity ($\beta=0.45$, $P<0.001$). In addition, multivariate stepwise forward regression analysis found that the apoB/apoA1 ratio was the major determinant for hsCRP.
Conclusions: Our findings indicate that patients with active TA have proatherogenic lipid and lipoprotein profiles. In addition, the ratio of apoB to apoA1 could be a marker to be monitored and a target that needs to be treated in patients with active TA.

GW25-e4381

Popliteal artery embolization in superficial femoral artery interventions: incidence, risk factors, treatment and prognosis

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Objectives: Endovascular therapy has gained acceptance as a primary treatment modality for superficial femoral artery (SFA) diseases. Popliteal artery embolization (PAE) is a severe complication in SFA interventions. The purpose of this study was to evaluate the incidence, risk factors, treatment and prognosis of PAE in primary SFA percutaneous transluminal angioplasty and stenting (PTA+S).
Methods: Chronic SFA arteriosclerosis cases that underwent primary PTA+S were reviewed from a prospectively maintained database. Runoff vessels were evaluated in all cases before and after interventions for detection of PAE. The primary patency, secondary patency and limb salvage rates were calculated using Kaplan-Meier analysis and compared using log-rank analysis.
Results: There were 436 lesions treated in 388 patients with 10 PAE events (2.3%) in total. PAE rate was significantly higher in Transatlantic Inter-Society Consensus (TASC) C/D group compared with TASC A/B group (OR=8.91, P=0.002), in chronic total occlusion (CTO) lesions compared with stenotic lesions ($P<0.0001$), and in group with history of cerebral ischemic stroke (OR=6.11, P=0.007). PAE rates were not significantly affected by age, sex, smoking, hypertension, diabetes, hyperlipidemia and runoff status. The 12-month and 24-month primary patency, secondary patency and limb salvage rates in PAE group showed no significant differences comparing with non-PAE group.
Conclusions: PAE is a rare event in primary SFA PTA+S. TASC C/D lesion, CTO and cerebral ischemic stroke history are risk factors for PAE. PAE can be treated by

comprehensive techniques. If the popliteal flow is restored in time, PAE has no significant effect on long-term patency and limb salvage rates.

Cardiovascular Disease and Surgical Care

GW25-e4207

Effect of nurse-led peer education program on self-management behavior for coronary stent implantation patients

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Objectives: To study the effect of community nurse-led peer education program on self-management behavior of coronary stent implantation patients.
Methods: The convenience samping method was used in the study. A total of 120 coronary stent implantation patients were collected during April to October 2012. They are randomly divided into two groups, each group had 60 participants. The experimental group accepted the intervention of peer education program which organized and implemented by cardiologists and nurses The program was provided in 6 sessions of 1-2 hour duration in 12 weeks. Peer educators introduce coronary stent implantation related knowledge including postoperative medication, diet, exercise, emotion management, etc. At the same time, the Peer educators and the audience share the experice of self-management. Two medical staff responsible for on-site supervision and provide consulting. Self-management behavior of 120 patients after coronary stent implantation were evaluated after the program using validated questionnaire.
Results: Compared with control group, there are significant differences in terms of smoking, drinking, durg compliance, physical activity, emotional control and disease knowledge($P<0.05$).
Conclusions: Nures-led peer education program will promote of self-management behavior of coronary stent implantation patients in communities.

GW25-e2101

Correlation Analysis and Nursing about Patients' Anxiety and Surgical Complications in Coronary Intervention Diagnosis

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Objectives: With the progress of coronary heart disease intervention technology, the safety of the operation was greatly improved, but the postoperative blood vessel complications couldn't be eliminated. The aim of this study was to explore correlation analysis and nursing about anxiety and surgical complications in coronary intervention diagnosis.
Methods: 806 patients in Coronary Intervention were divided into two groups (the anxious group 390 and the not anxious group 416)and were compared in complications and postoperative pain degree (NRS with pain score), analyzed the cause of anxiety with the self-made questionnaire. There were no statistically significant differences in age, duration, diabetes between two groups. Spss16.0 was applied to compare the two groups, a chi-square test.
Results: The two groups were statistically significant differences in the low blood sugar, the vagus nerve reaction disease and pain score, (12.3%, 4%,χ^2=4.893, P=0.027), (12.3%, 0, χ^2= 5.321, P=0.021) and Z=-4.341, P=0<0.05. The operation effect and the way (85.85%) pre-operation and complications (86.79%) post-operation were the main reasons for anxiety.
Conclusions: The postoperative complications in coronary intervention diagnosis and treatment were effected factors of anxiety, but some factors could be analyzed, so the systematic nursing service could prevent complications.

GW25-e3233

Effects and mechanisms of Nicorandil anatomic no reflow after myocardial ischemia/reperfusion in rats

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Objectives: To establish the model of myocardial ischemia-reperfusion, to investigate effects and mechanisms of nicorandil and adenosine anatomic no reflow and ventricular remodeling after acute myocardial ischemia reperfusion in rats. To Investigate the pharmacological effects and the safety between nicorandil with adenosine.
Methods: Male SD rats were randomized into sham operation group, control group, adenosine treatment group and nicorandil treatment group. For acute experiments, control group, adenosine treatment group and nicorandil treatment group were subjected ischemia for 45 minutes by ligation of curonary artery after thoracotomy and sequently reperfusion for 120 minutes to establish acute myocardial ischemia/reperfusion no reflow models. Sham operation group weren't underwent occlusion of coronary artery. All rats were sacrificed after reperfusion for 120 minutes. Thioflavine S, EB and TTC staining were performed to eveluate area of no reflow(ANR), infracted aera(IA), risk area (RA) of heart. For chronic experiments, control group, adenosine treatment group and nicorandil treatment group were subjected ischemia for 45 minutes by ligation of curonary artery after thoracotomy and sequently reperfusion to establish myocardial ischemia/reperfusion no reflow models. Sham operation group weren't underwent occlusion of coronary artery. On the 28th day after operation, cardiac function in all surviving rats were evaluated by echocardiography. Rats were sacrificed. Picrosirius red staining plus light microscopy was used to quantitive analysize thickness of left ventricular free wall in infracted region(LVWT, SPD and SPT/LVWT, MAAS and CVF).
Results: For acute experiments, after 120 minutes for reperfosion, here were no statistical differences in ARR/LV among control group, adenosine group and nicorandil group ($P>0.05$). A markedly reduced NA/AAR and ANR/AAR observed in nicorandil group and adenosine group, and the differences were significant compared with the control group($P<0.01$). This illustrated that nicorandil and adenosine reduced size of myocardial infarct, area of no reflow and improved myocardial perfusion. For chronic experiments, after 28 days for reperfosion and than evaluating cardiac structure and function, cardiac ultrasound showed that the ejection fraction (EF) of rat in nicorandil group was significantly increased and the differences were significant compared with the control group ($P<0.05$), while end-diastolic volume (EDV) was decreased significantly ($P<0.01$). It showed that nicorandil could improve ejection fraction of left ventricle and reduce end-diastolic volume. Meanwhile, rats were sacrificed. There was myocardial fibrosis, Fibroblast proliferation and collagen deposition, in the area of myocardial infarction with control group, resulted in ventricular remodeling. The statistical differences were significant in reducing the degree of fibrosis compared with the control group ($P<0.01$). This displayed that nicorandil and adenosine both reduced the extent of myocardial fibrosis Improved ventricular remodeling pathological stage of myocardial infarction.
Conclusions: This work The study concluded that nicorandil reduced size of myocardial infarct, area of no reflow and improved myocardial perfusion and ejection fraction, decreased end-diastolic volume. as well as reduced the extent of myocardial fibrosis improved ventricular remodeling pathological stage of myocardial infarction in the SD rats animal model of Myocardial ischemia reperfusion. The mechanism and effect between nicorandil and adenosine were resemble.

GW25-e4302

Importance of Whole Range of Care and Love Mode for Patients of the Chest Pain Center with STEMI

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Objectives: Cardiovascular diseases, especially coronary heart disease has become the second leading cause of death from disease. The thrombolysis from a Rural hospital and a quickly transportation of the AMI patients in time window to the Central Hospital for direct PCI, that has become an important method of reducing acute mortality and improving the long-term prognosis. That is why the Chest Pain Centers came into being. The CPC will be to promote the advantages of multi-disciplinary integration, rational use of medical resources, that is the practice of managed care concept. Nursing care and love is a process that the nurses apply their expertise and skills to help patients restore or maintain a healthy. Nursing care and love is focused on understanding the uniqueness of each person and try to help patients restore or enhance response capabilities. It has three meanings: (1) the nursing behavior; (2) the care and love that attitude and emotional costs to treat patients; (3) the responsibility. And the whole range of care and love model in Chest Pain Center patients with STEMI is theoretically consistent with the purposes and objectives of CPC's established throughout. This study is to explore the effect of the care and love model evaluation practices in the treatment and rehabilitation for the patients with STEMI of CPC.
Methods: Selected the emergency "chest pain" STEMI patients from May 1, 2013 to June 1, 2013(before the CPC), in the First Hospital of Jilin University, to admitted them for the control group, a total of 49 people; Chose the "chest pain" STEMI patients from 1 October 2013 to 1 November 2013 in the hospital for the experimental group, a total of 56 people. Both groups are voluntarily enrolled in the study, and the exclusion of non- independent activity, no self-care ability, no language ability of patients after admission underwent primary PCI. And the control group use traditional model of care in nursing; the experimental group use the nursing model of care and love until their return to the community for the entire continuity of care of the patient's care, including the application of the advanced equipments such as the IVT Que fly rescue system, rapid test systems, and the triple CT for rapid triage diagnosis and treatment, perioperative care, cardiac rehabilitation guidance and community follow-up guidance. Comparison with the Activity of Daily Living Scale(ADL) of patients, EF%, and the restenosis rates. Using SPSS17.0 statistical software for data analysis.
Results: The ADL scores of patients in the experimental group was (16.3±5.7) points, including the Physical Self-maintenance Scale (PSMS) score was (6.2±2.7) points,and the Instrumental Activities of Daily Living Scale (IADL) score was (9.9±3.5) points; ADL scores of patients in the control group was (23.1±8.5) points, including PSMS score was (7.2±2.4) points, IADL score was (15.9±6.5) min. The traditional model of care and nursing care for the whole pattern comparison in terms of ADL